ABSTRACT OF THE DISCLOSURE

The fuel supply apparatus for supplying fuel to an internal combustion engine has a fuel tank (2), a first fuel pump (6) that supplies fuel from the fuel tank to a fuel line (10), a second fuel pump (12) that supplies fuel from the fuel line (10) via a pressurized line to at least one fuel valve (16) and a fuel return line (22) that connects the fuel line (10) to the fuel tank for return of excess fuel. A shut off valve (30), which is closed at high temperatures, and a pressure regulator valve (26) are arranged hydraulically in series in the fuel return line (22). A fuel scavenger line (60) is provided, by which fuel at high temperatures is returned to the fuel tank (2). The fuel scavenger line (60) conducts the fuel back to the fuel tank (2), at least partially through the second fuel pump (12) and through a hydraulic resistance. Gas bubble formation is prevented by a high fuel supply pressure and by transfer of heat from the second fuel pump (12).